

Work Order ID 78505

78505

Page 1

January-10-12 1:24:21 PM

Item ID: D350-604-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rear Locker Extender
 Start Date: 10/01/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/02/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: M.C.J Date: 12/01/10 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2273	<u>DE</u>
D350-604-041	<u>A</u>
DSI9470	<u>A</u>

100 0.00
100 DOCUMENT CONTROL
 DC Memo 0.00
 Document Control Photocopy bluefile and create labels per PPP D350-604-041 CHG002
203
ECN 12-521
8012025
MW 12/04/25

110 0.00
110 PURCHASING
 Purchasing Memo 0.00
 Purchasing Issue P/O: 15853
 Description: D350-604-041 Rear locker extender.
 Supplier: Delastek.
 Certification of Conformity and process sheet from Delastek is required.
 4 x 2600-6 Camlock stud - Ship to Delastek B 120077
CL 12/01/11 11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

January-10-12 1:24:21 PM

78505

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

*** 1 ***

Cust Item ID:

*** 1 ***

Customer:

Run Start *NR1*

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

120	Receive & Inspect for Damage & Mat'l Certs	0.00
-----	--	------

120

Packaging

Packaging

Packaging

Memo

Ensure a copy of Certification of Conformity and process sheet from Delastek is attached.

0.00

130	QC5- Inspect part completeness to step on W/O	0.00
-----	---	------

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O	0.00
---	------

Memo

Check hole locations to template. DT 8824 Check process sheet and audit.

0.00

140	Pick Kit	0.00
-----	----------	------

140

Packaging

Packaging

Pick Kit	0.00
----------	------

Memo

0.00

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

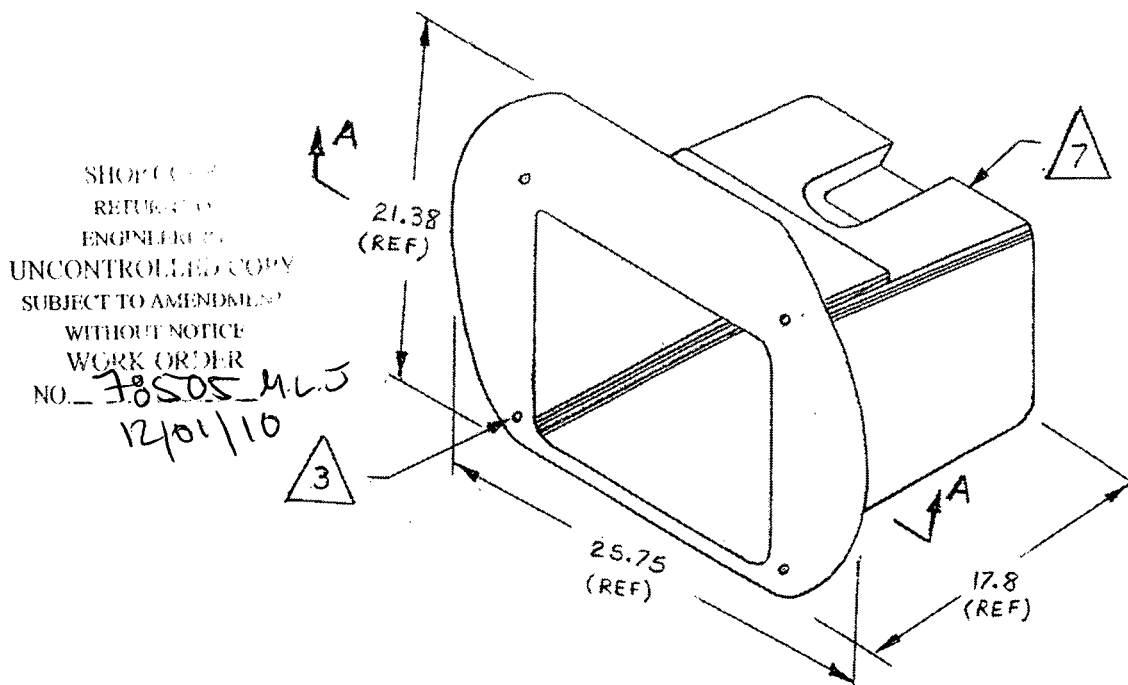
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



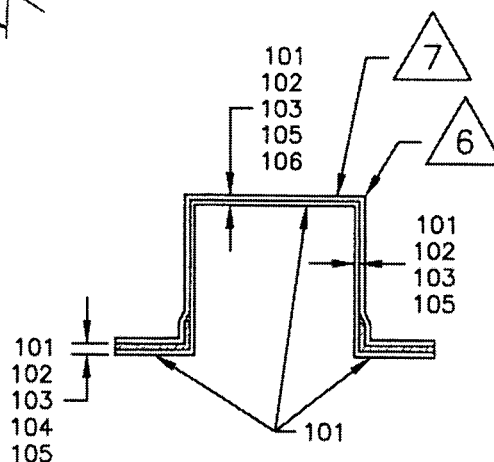
DESIGN JB	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2273	REV. D SHEET 1 OF 1
DATE 02.04.01		TITLE 350 REAR LOCKER EXTENDER	SCALE NTS
B	96.05.27	RE-DRAWN	
C	02.01.30	CLARIFY MATERIAL, LAYUP, AND TOOLING	
D	02.04.01	REMOVE EPOCAST, ADD SURFACE FINISH	

RELEASED
02.04.03 *[Signature]*



NOTES:

- 1) LAMINATE PER DART QSI 006. LAMINATION SCHEDULE PER THIS DRAWING.
- 2) LAYUP USING DT8010 MOLD. WET LAYUP NO BAG/VACUUM.
- 3) TRIM & DRILL PER DT8020. OPEN HOLES TO $\phi 0.257$ (4 PLACES).
- 4) MATERIALS:
RESIN: DERAKANE 470-36/411/510A40
FIBRE: 9oz = 9.7 oz 7781 WEAVE "S" GLASS
18oz = 18.0 oz ROVING "E" GLASS.
- 5) CONSTRUCTION:
101-WHITE GLOSS GELCOAT # GEL 944W005.
102-9oz ALL OVER.
103-18oz ALL OVER.
104-18oz RE-INFORCE FRONT FLANGE EXTENDING 2" ON SIDES.
105-9oz ALL OVER.
106-PEEL PLY.
- 6) MATTE TO HOLD DOWN CORNERS AS REQUIRED.
- 7) FINISH THIS SURFACE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S.
- 8) ALL DIMENSIONS ARE IN INCHES.



SECTION A-A

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Delastek inc.
2699 5e avenue
Local 14, C.P. 10100
Grand-Mère, Québec G9T 5K7
Can ** Fax (819)533-3494 **

PACKING SLIP CERTIFICATE OF COMPLIANCE

Invoice #	43114
Customer #	DART US

Telephone: (819) 533-5788

Warehouse: MAIN

Bill to:

DART AEROSPACE LTD
1270, Aberdeen Street
Hawksbury, Ontario K6A 1K7
Canada

Ship to:

DART AEROSPACE LTD
1270, Aberdeen Street
Hawksbury, Ontario K6A 1K7
Canada

Telephone: 613-632-5200

Contact: Linda Lacelle

Ship via		F.O.B.		Terms		Salesperson	
FEDEX P1 Collect		Origin		Net 30 days USA		Claude Lessard, ext. 233	
Ship date	Order Date	Our PO #	Order by	Your PO #	GST/PST #		
23/04/2012	13/01/2012	19686	Chantal Lavoie	PO15853			
Order Qty	B.O. Qty	Current Ship.	Item #	Item Description			
1	0	1	DKC134-0081	Line #4 Rear Locker Extender D350-604-041P B78505 U de M : Each Référence DKA362-0004 DWG: D350-604-041 REV. A1 D2273 REV. E No. série B78505 <div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">No. lot 40023</div> Sizky/p5			

It is hereby certified that all materials, process and finished items were controlled and tested in accordance with the requirements of the purchase order and applicable specifications. All such records are on file at our plant and available for review upon request.

☒ Cust. ☐ Adm. ☐ Quality ☐ Ship.

Accepted by:



Quality department AQ-357

Date: Mardi, 2012-04-03 07:52:29
Utilisateur: marc dubé

Feuille de Procédé

Client : DART US DART AEROSPACE LTD
Numéro Job : 40023
Numéro Soumission : 5215
Numéro B.A. :
Cette fois : 2012-04-03 No. B.V. :
Prsht Rev. : NC
Prem. fois : - - Type :
Job précédente : 40022
Écrit par :
Vérifié & Approuvé par :
Commentaires : N° de pièce Laminée Dart Aerospace: D2273
N° de pièce Assemblage Dart Aerospace: D350-604-041

Nom Dessin : REAR LOCKER EXTENDER
Numéro Article : DKC134-0081
Numéro Dessin : D350-604-041 & D2273
Projet Numéro : DK-362
Révision dessin : A1 & E
Matériel : Derakane 470-36/411/510
Date Dûe : 2012-04-10 Qté: 1 Udm: UNITE

B78505

Process Sheet Rév.: 01Ajustement de quantité de l'article AAC2011

Produit additionnel

Numéro Job:



Séq.: Machine ou Opération: Description:

1.0 PRÉPARATION Préparation du moule



Commentaire Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Faire la préparation du moule DKO-0250 selon IG 0009.

Date: 17 avril 12 Sceau:



2.0 AAC2011 N° 2330PAWK745, Gel Coat Polycore Fireblock Promoted

Commentaire Qty.: 2.50 KILOGRAMME(s)/Unit Total : 2.50 KILOGRAMME(s)

N° 2330PAWK745, Gel Coat Polycore Fireblock Promoted N° de Lot: 1-34789-1

3.0 AMB0286 Catalyst N° DDM-9

Commentaire Qty.: 0.0070 GALLON(s)/Unit Total : 0.0070 GALLON(s)

Catalyst N° DDM-9 N° de Lot: 1-27829-1

4.0 AC0747 Acetone

Commentaire Qty.: 0.200 KILOGRAMME(s)/Unit Total : 0.200 KILOGRAMME(s)

5.0 PREP-GENERAL Préparation du matériel ✓



Commentaire Setup: 0.00Hrs/ Run: 45.0000Min Total Run : 0.7500Hrs

Tailler le matériel selon les dimensions requises à l'aide de gabarit de trimage prévus à cet effet.

Date: 28/03/12 Sceau:



Feuille de Procédé

Client: DART US DART AEROSPACE LTD
Numéro Job: 40023

Nom Dessin: REAR LOCKER EXTENDER
Numéro Article: DKC134-0081

Numéro Job:



Séq.: Machine ou Opération:

Description:

13.0 AMB0212

Résine (411B7530) 411-350 promo. 75min.

Commentaire Qty.: 0.150 LITRE(s)/Unit Total: 0.150 LITRE(s)

Résine (411B7530) 411-350 promo. 75min N° de Lot:

N/A



14.0 AMB0286

Catalyst N° DDM-9

Commentaire Qty.: 0.0070 GALLON(s)/Unit Total: 0.0070 GALLON(s)

Catalyst N° DDM-9 N° de Lot:

N/A



15.0 FINITION

Finition Générale



Commentaire Setup: 0.00Hrs/ Run: 30.0000Min Total Run: 0.5000Hrs

Injecter les bulles d'air selon IF134-0003 si applicable.

Quantité: Date: Sceau:

N/A



16.0 DÉMOULAGE

Démoulage de la pièce



Commentaire Setup: 0.00Hrs/ Run: 10.0000Min Total Run: 0.1667Hrs

Faire le démoulage de la pièce selon IF134-0003 en poussant de l'air à l'intérieur tout en faisant bien attention de ne pas l'endommager.

Quantité: 1 Date: 18 avril 12 Sceau:



17.0 TRIMAGE

Trimage



Commentaire Setup: 0.00Hrs/ Run: 40.0000Min Total Run: 0.6667Hrs

Selon IF 134-0002.

Faire le sablage si nécessaire.

Quantité: 1 Date: 19 avril 12 Sceau:



18.0 AAC1021

Dupont Primer N° 7704S

Commentaire Qty.: 0.3400 UNITE(s)/Unit Total: 0.3400 UNITE(s)

Dupont Primer N° 7704S N° de Lot: 1-33616-3

19.0 AAC1101

N° 7775S, Dupont Activator - Reducer Chromabase

Commentaire Qty.: 0.0670 UNITE(s)/Unit Total: 0.0670 UNITE(s)

N° 7775S, Dupont Activator - Reducer Chromabase N° de Lot: 1-30548-3

Feuille de Procédé

Client: DART US DART AEROSPACE LTD

Nom Dessin: REAR LOCKER EXTENDER

Numéro Job: 40023

Numéro Article: DKC134-0081

Numéro Job:



# Séq.:	Machine ou Opération:	Description :
---------	-----------------------	---------------

20.0

PRIMER

Application primer ✓



Commentair Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Appliquer le primer selon IG 0008.

Quantité: 1

Date: 19-04-12



N° fiche de Mélange: N/A 19-04-12



21.0

AAC1607

Camlock Stud 2600-4 (or Monadnock 1126000-4)

Commentair Qty.: 4 UNITE(s)/Unit Total : 4 UNITE(s)

Camlock Stud 2600-4 (or Monadnock 1126000-4)

N° de Lot: 2x 1-33960-1

22.0

AAC332

Washer 2600-LW (1127700)

Commentair Qty.: 4 UNITE(s)/Unit Total : 4 UNITE(s)

Washer 2600-LW (1127700)

N° de Lot: 1-32667-6

23.0

ASSEMBLAGE

Assemblage mécanique ✓



Commentair Setup: 0.00Hrs/ Run: 15.0000Min Total Run : 0.2500Hrs

Faire l'assemblage selon IF134-0004.

Démasquer la pièce.

Assembler les "Studs" selon IG 0037.

Quantité: 1

Date: 20-04-12



24.0

IDENTIFICATION

Identification des pièces



Commentair Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs

Faire l'identification de la pièce selon IF134-0005.

N° de pièce Cleint: D350-604-041

N° de Job: 40023

N° de Fabrication: 04/20/12

Quantité: 1

Date: 04/20/12



25.0

INSPEC FINAL

Inspection finale



Commentair Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs

Faire l'inspection dimensionnelle et visuelle de la pièce selon le dessin.

Feuille de Procédé

Client: DART US DART AEROSPACE LTD
Numéro Job: 40023

Nom Dessin: REAR LOCKER EXTENDER
Numéro Article: DKC134-0081

Numéro Job:



Séq.: Machine ou Opération:

Quantité: 1 Date: 21/04/2012 Sceau:



Description :

26.0

EMBAL / ENTREPO

Emballage & Entreposage



Commentaire Setup: 0.00Hrs/ Run: 10.0000Min Total Run : 0.1667Hrs

Faire l'emballage selon IG 0057.

Quantité: 1 Date: 21/04/2012 Sceau:

APP 23 2012



Fab: 20 avril 2012

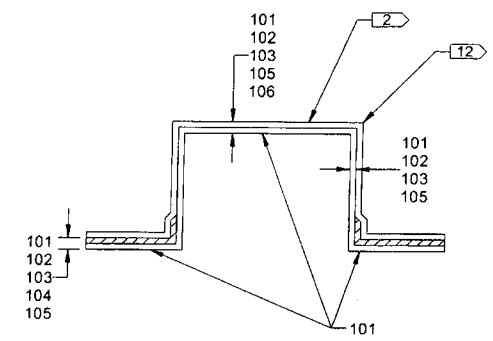
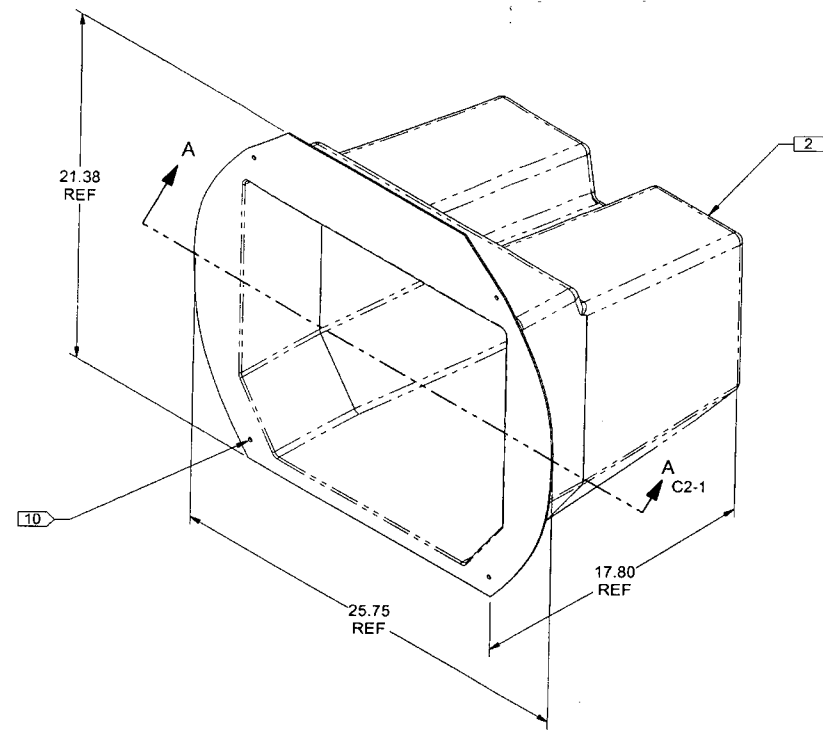
Note: 25.0

J'ai remarqué dans les reports 1 crack minime dans le
fond du rear locker (gel coat) - Elle est à peine perceptible.
mais peu grossir en cas de choc lors du transport

J.L. 21/04/2012



78505



SECTION A-A
C4-1

RELEASED
2012-03-29

NOTES:

- 1) MATERIALS:
RESIN: DERAKANE 470-36/411/510A40
FIBRE: 9 oz = 9.7 oz 7781 WEAVE "S" GLASS
18 oz = 18.0 oz ROVING "E" GLASS
- 2) FINISH: FINISH THIS SURFACE WITH DUPONT GREY PRIMER LE 3404-S/LE 1175-S
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 7.75 lbs
- 8) LAMINATE PER DART QSI 006, LAMINATION SCHEDULE PER THIS DRAWING.
- 9) LAYUP USING DT8010 MOLD. WET LAYUP NO BAG/VACCUUM
- 10) TRIM & DRILL PER DT8020. OPEN HOLES TO Ø0.257 (4 PLACES)
- 11) CONSTRUCTION:
101-WHITE GLOSS GELCOAT # GEL 2330PAWK745 TO MIN THICKNESS OF 0.020
102-9 oz ALL OVER
103-18 oz ALL OVER
104-18 oz REINFORCE FRONT FLANGE EXTENDING 2" ON SIDES
105-9 oz ALL OVER
106-PEEL PLY
- 12) MATTE TO HOLD DOWN CORNERS AS REQUIRED

D2273 REAR LOCKER EXTENDER

Rev E
all per DS Email
see attached

F	PRIMER LE 3404-S/LE 1175-S WAS 1144-S, ZN A6-1	DC	12.02.27
E	CHANGED SURFACE FINISH FROM 944W005 GELCOAT TO 2330PAWK745 GELCOAT, ZN A7-1. UPDATED DWG TO CURRENT STANDARDS.	DC	12.02.02
D	REMOVE EPOCAST, ADD SURFACE FINISH	CP	02.04.01
C	CLARIFY MATERIAL, LAYUP, AND TOOLING	RF	02.01.30
B	RE-DRAWN	MM	98.05.27
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DC		
CHECKED	DC	DRAWING NO.	REV. F
MFG. APPR.	DC	D2273	SHEET 1 OF 1
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	350 REAR LOCKER EXTENDER NTS	
DATE	12.02.27	<small>COPYRIGHT © 1986 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Linda Lacelle

From: dshepherd@dartaero.com
Sent: April-03-12 1:38 PM
To: Daniel Campbell; 'Linda Lacelle'
Cc: Harvey Siemens; Chantal Lavoie
Subject: Re: ECN D2273

Dan,

I think Delastek is confused. Leave the dwgs for now ... I don't care whether we use Rev E primer or Rev F primer ... My understanding is that your Rev F dwg represents what is procurable going forward.

David

Sent from my BlackBerry device on the Rogers Wireless Network

From: "Daniel Campbell" <dcampbell@dartaero.com>
Date: Tue, 3 Apr 2012 10:42:39 -0600
To: 'Linda Lacelle' <llacelle@dartaero.com>; <dshepherd@dartaero.com>
Cc: Harvey Siemens <hsiemens@dartaero.com>; Chantal Lavoie <clavoie@dartaero.com>
Subject: RE: ECN D2273

Hi,

I'm a little confused about this.

I thought we had checked back in Feb. and the 7704-S was discontinued and replaced with LE-3404-S / LE1175-S ?

Anyway, I can go back and update the following to call out 7704-S:

D604-350

1. D2273
2. ICA-D350-604

D605-206

1. D2566
2. ICA-D605-206

I'm not sure if David is flying today - we might have to wait for him to weigh in.

Thanks,
Dan

From: Linda Lacelle [mailto:llacelle@dartaero.com]
Sent: April-03-12 10:00 AM
To: dshepherd@dartaero.com; Daniel Campbell
Subject: FW: ECN D2273

From: Jocelyne Laurin [<mailto:JLaurin@delastek.com>]
Sent: April-03-12 11:30 AM
To: Linda Lacelle
Cc: 'Chantal Lavoie'; Céline Audet
Subject: ECN D2273

Hello Linda,

For the Gel Coat we are presently using N° 2330PAWK745, Gel Coat Polycore Fireblock and for the primer Dupont Primer N° 7704S. Thank you and have a nice day.

Jocelyne Laurin
Agente Service à la clientèle/Customer Service Agent
DELASTEK INC.
jlaurin@delastek.com

De : Linda Lacelle [<mailto:llacelle@dartaero.com>]
Envoyé : 2 avril 2012 14:54
À : Jocelyne Laurin; 'Chantal Lavoie'
Cc : David Paradis; Céline Audet
Objet : RE: ECN D2273
Importance : Haute

Jocelyne,

This is the current primer you are using. We need to understand exactly what you are currently using. Please DO NOT stop production on the parts to ship this Thursday.

L

From: Jocelyne Laurin [<mailto:JLaurin@delastek.com>]
Sent: April-02-12 10:18 AM
To: 'Chantal Lavoie'; Linda Lacelle
Cc: David Paradis; Céline Audet
Subject: ECN D2273
Importance: High

Hello Chantal,

Before we can ship the rearlockers at rev. F, (for order attached), we have to analyse the implications, so the confirmed dates no longer stand, since they were for revision E. As soon as the analysis is completed we will forward a new quote (if applicable) as well as the new delivery dates, unless you want them at Rev. E. Please advise ASAP as they are being produced at the moment. Thank you so much and have a nice day.

Jocelyne Laurin
Agente Service à la clientèle/Customer Service Agent
DELASTEK INC.
jlaurin@delastek.com

De : Chantal Lavoie [<mailto:clavoie@dartaero.com>]

Envoyé : 30 mars 2012 10:38

À : Jocelyne Laurin

Cc : Lacelle, Linda

Objet : ECN D2273

Hi Jocelyne,

Please see attached for new revision for rearlocker they are now at rev. F.

Thanks

Chantal

No virus found in this message.

Checked by AVG - www.avg.com

Version: 2012.0.1913 / Virus Database: 2114/4912 - Release Date: 04/03/12